HazMat 38-05
Revised 1/06

Environmental and Public Protection Cabinet
Office of Housing, Buildings and Construction
Hazardous Materials Section
101 Sea Hero Road, Suite 100
Frankfort, Kentucky 40601-5405
Telephone: (502) 573-1702 Fax: (502) 573-1695

PERMIT APPLICATION FOR LINING / REPAIR OF FIBERGLASS REINFORCED PIPING (FRP) OF UNDERGROUND STORAGE TANKS (UGST)

For Office Use Only

Permit No.: _____ **Approved By: _____**
Amount Paid: _____ **Date Approved: _____**

Installation Site

_____
NAME OF BUSINESS/COMPANY (D/B/A)

_____
STREET ADDRESS

_____
CITY STATE ZIP CODE

( ) _____
TELEPHONE NUMBER COUNTY

_____
UST SITE I.D. NUMBER (EXISTING SITES ONLY)

Owner of Tanks

_____
OWNER/OPERATOR/COMPANY NAME

_____
STREET ADDRESS

_____
CITY STATE ZIP CODE

( ) _____
TELEPHONE NUMBER COUNTY

Interior Lining Contractor

_____
COMPANY NAME

_____
STREET ADDRESS

_____
CITY STATE ZIP CODE

( )
TELEPHONE NUMBER

Certified Individual

_____
NAME OF CONTRACTOR

( )
TELEPHONE NUMBER

_____
INDIVIDUAL'S CERTIFICATION NUMBER EXPIRATION DATE

Type of Facility

☐ Commercial ☐ Private Use ☐ Government ☐ Industrial ☐ Bulk Plant

☐ Other (Please Specify): _____

1. Tank Information –

TANK TYPE CODES

01 Single Wall FRP
02 Double Wall FRP
03 Other (Please Specify):

NOTE: Tank numbers shall correspond with the tank numbers on the accompanying site plan.

TANK #1:

CAPACITY (GALLONS)	TANK TYPE CODE	APPROXIMATE AGE OF TANKS

PRODUCT STORED

☐ Tank to be lined ☐ Tank previously lined Reason for Lining: ☐ Upgrade ☐ Leak Repair

TANK #2:

CAPACITY (GALLONS)	TANK TYPE CODE	APPROXIMATE AGE OF TANKS

PRODUCT STORED

☐ Tank to be lined ☐ Tank previously lined Reason for Lining: ☐ Upgrade ☐ Leak Repair

TANK #3:

CAPACITY (GALLONS)	TANK TYPE CODE	APPROXIMATE AGE OF TANKS

PRODUCT STORED

☐ Tank to be lined ☐ Tank previously lined Reason for Lining: ☐ Upgrade ☐ Leak Repair

2. Tank Information *(continued)* –

TANK #4:

CAPACITY (GALLONS) | TANK TYPE CODE | APPROXIMATE AGE OF TANKS

PRODUCT STORED

☐ Tank to be lined ☐ Tank previously lined Reason for Lining: ☐ Upgrade ☐ Leak Repair

TANK #5:

CAPACITY (GALLONS) | TANK TYPE CODE | APPROXIMATE AGE OF TANKS

PRODUCT STORED

☐ Tank to be lined ☐ Tank previously lined Reason for Lining: ☐ Upgrade ☐ Leak Repair

2. Lining Material Specifications -

a) Manufacturer of lining material: _____

b) Name of lining material: _____

Type of lining material: _____

c) Lining material compatible with any stored product? ☐ Yes ☐ No

Note: If no, please explain: _____

d) Thickness of coating to be applied to each tank (indicate mils):

_____ TANK #1 _____ TANK #2 _____ TANK #3 _____ TANK #4 _____ TANK #5

e) Each coating application compatible with alcohol based and reformulated fuels. ☐ Yes ☐ No

f) Each tank to be properly prepared per API 1631 and NLPA 631 Standards. ☐ Yes ☐ No

g) Each coating application to be completed per manufacturer's specification. ☐ Yes ☐ No

3. Notification Information -

a) Estimated date of tank preparation: ☐☐ ☐☐ ☐☐

b) Estimated date of tank evaluation: ☐☐ ☐☐ ☐☐

c) Estimated date of coating application: ☐☐ ☐☐ ☐☐

d) Estimated date of completion: ☐☐ ☐☐ ☐☐

Note: Precision test mandatory upon completion and results shall be made available for inspection upon request.

e) Manufacturer's sealant specification data will be submitted to the Office of the State Fire Marshal.
☐ Yes ☐ No

4. Tank Preparation Procedure -

a) If lining FRP tanks, the appropriate inspection, testing, and lining procedures will be accomplished only after consultation with the tank manufacturer or a qualified person. ☐ Yes ☐ No

b) Employees performing the lining or tanks repairs are knowledgeable in confined space entry procedures, and of purging, entry, and cleaning procedures per applicable standards.
☐ Yes ☐ No

5. Safety Precautions -

a) Static electricity precautions regarding grounding of equipment, tank entry personnel clothing and bonding cable requirements for the initial cleaning operation will be properly observed.
☐ Yes ☐ No

b) Vapor reading of ten percent (10%) LFL or less will be verified immediately prior to removing the manway cover or cutting the tank access opening, and performed throughout the opening process to ensure a safe atmosphere. ☐ Yes ☐ No

c) Type of combustible gas indicator used for monitoring purposes:

d) Combustible gas indicator calibrated per manufacturer's specifications. ☐ Yes ☐ No

e) Personnel entering the tank will be equipped at all times with positive pressure air-supplied respirators with full face enclosure, safety harness connected to a safety line held by attendant outside the tank.
☐ Yes ☐ No

f) The interior surface of the tank must be examined by using a light fixture that meets the requirement of NFPA 70 (Class 1, Division 1, Group D). ☐ Yes ☐ No

6. Visual Inspection -

a) Measurements for geometric distortion will be taken every three feet (3') of the interior diameter of the tank. ☐ Yes ☐ No

6. Visual Inspection *(continued)* -

b) The tank shell wall will be hardness tested using a Barcol hardness tester, GYZJ 935, or other acceptable instrument to determine if the hardness meets manufacturer's specifications, which should verify whether chemical attack has occurred. ☐ Yes ☐ No

7. Opening and Repair Procedures -

a) The access opening will be cold cut in the dome of the tank with the minimum dimensions of 22" by 22". ☐ Yes ☐ No

b) All perimeters of the dome section to be cut will be at least eight inches (8") from the tank's ribs. ☐ Yes ☐ No

c) The access opening will be bevel cut using an air-driven saber saw, utilizing lubricating oil to reduce friction, heat, and possible sparks. ☐ Yes ☐ No

d) After completion of surface preparation, multiple layers of 1.5 ounces per square foot fiberglass mat will be applied to the damaged area, with the initial layer extending at least four inches (4") beyond the perimeter of the damaged area and additional layers two inches (2") beyond the perimeter of the previous applied layer. ☐ Yes ☐ No

e) If a section of the tank is missing, a splash will be cut ½ inch larger on all sides than the section that is missing with the edges and side of the splash that the repair FRP laminates properly sandblasted or ground. ☐ Yes ☐ No

Note: *Sandblasting is preferred because it will expose glass fibers during surface preparation that will provide a mechanical bond for the repair of lining material. Grinding could shear or melt glass fibers and not expose as many glass fibers to provide as strong a bonding surface*

f) Fractures will have holes drilled at each end of the fracture. The drilled holes shall be larger in diameter than the width of the fracture. ☐ Yes ☐ No

g) The removal, surface preparation, attachment and covering, as well as testing of a tank fitting plate assembly will be done per applicable standard requirements. ☐ Yes ☐ No

h) Manway assembly repair or replacement will be accomplished by the use of materials which are FRP compatible and applied in conformance with applicable standards. ☐ Yes ☐ No

i) Manway assembly will be provided with a riser and access cover accessible from grade level. ☐ Yes ☐ No

7. Opening and Repair Procedures (Continued)-

j) The FRP tank will be lined for compatibility with products other than those that were intended for storage as originally manufactured, with a proper lining material that will be at least 100 to 125 mils thick. ☐ Yes ☐ No

k) A ¼ inch steel striker plate with the minimum dimensions of 8" x 8" will be installed under the gauge and fill openings if the tank will be lined or if the striker plate was not installed previously.
☐ Yes ☐ No

8. Tank Closing -

a) If an opening is cut, the removed section of the end cap and a minimum of six inches (6") of the adjoining tank wall surface will be abrasive blasted. ☐ Yes ☐ No

b) The seams of the entry hole will be sealed by the application of five (5) plies of 1½ ounces per square foot fiberglass chopped strand matting saturated with lining material extending a minimum of four inches (4") beyond the perimeter of the access opening seams. All fiberglass material will be treated with silane, and the final laminate equal to or exceeding the wall thickness of the original tank wall.
☐ Yes ☐ No

c) The access opening seal and accessible areas that were repaired will be tested for tightness prior to covering with backfill and paving by performing an air pressure test at a pressure recommended by the tank manufacturer and applying a soap solution to the seal and accessible repair areas and inspecting it for bubbles. *This test is only allowed when the tank does not contain petroleum product liquid or vapors.* ☐ Yes ☐ No

d) Before the tank excavation is backfilled, the tank will be tightness-tested using a precision test in accordance with NFPA 329. Particular attention will be paid to the access opening seal and accessible areas of repair. ☐ Yes ☐ No

Fee Schedule

A charge of $100.00 for the first tank and $50.00 for each additional tank is required for this specialized review. **The required fee must accompany your application for permit.** Your check or money order should be made payable to the *"Kentucky State Treasurer"*. The name and location of the project must be indicated on the check or money order.

I, the undersigned, do hereby agree that this installation shall comply with all applicable requirements of the "Standards of Safety" promulgated in 815 KAR 10:060 and all other applicable standards as required. All answers in this application are true and accurate to the best of my knowledge.

_____ _____

Contractor (Signature) Date

Did you enclose your plan review fee? ☐ Yes ☐ No Amount: $ _____ .00

Note: Site plan, specifications and check or money order shall accompany this document for approval. Please return completed application to the address listed below:

Office of Housing, Buildings and Construction
Hazardous Materials Section
101 Sea Hero Road Suite 100
Frankfort, Kentucky 40601-5405

Approval by the State Fire Marshal

LOCATION NAME

IF THE NAME HAS CHANGED, WHAT WAS IT PREVIOUSLY CALLED

STREET ADDRESS

CITY COUNTY

PERMIT NUMBER

This storage tank system was tested on _____ with satisfactory results.

Pursuant to KRS 227.300 and 815 KAR 10:060 the above listed installation is found to have substantially complied with the Kentucky "*Standards of Safety"*.

Hazardous Materials Field Inspector **Badge #** **Date**

Site Plan